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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/623,294

07/18/2003

M. Steve Lessley

14120

4116

7590 07/24/2008
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EXAMINER

LAMB, BRENDA A

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

07/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14,17 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins et al in view Nakai et al 4,989,799 and England et al.

Mullins et al and Nakai et al are applied for the reasons noted above. The use of notch or groove or recessed portion in the side surface of a filament guide is known as exemplified England et al to obviously provide greater control of the direction of travel of the filament. Further, England teaches coating the surfaces of the filament guide to reduce the friction between the strand contacting surfaces of the filament guide about which the strand is at least partially drawn to increase the working life of the filament guide. Nakai et al discloses that drop out of the filaments between the guide surfaces of the two parallel guide rolls 4a', 4b' can be a problem if the length of the two parallel

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guide rolls 4a', 4b' is insufficient. Therefore, it would have been obvious to modify Mullins et al system by arranging a recessed side portion or groove or notch in side surface of its at least one of the strand orienting pin or parallel roll guide surfaces about which the strand is capable of being partially drawn since England et al shows providing a notch or groove in a filament guide surface and coating the notch or groove with low friction coating for the problem disclosed by Nakai et al of misalignment of the traveling filament or drop out of the traveling filament as the filaments travel through the parallel roll guide surface which would include Mullins et al parallel roll guide surface and reducing friction of the strand which is capable of being at least partially drawn about the recessed side portion or groove or notch in side surface of its at least one of the strand orienting pin or parallel roll guide surfaces to facilitate guiding of the strand through the system. Thus claim 34 is obvious over the above references. With respect to claim 14, the same rejection applied to claim 34 is applied here. England shows the cylindrical shaped strand axial orientation aligning member such in Figure 3 includes a recessed side portion which is comprised of at least a partially cylindrical surface portion. With respect to claim 17, Mullins et al aligning member extends parallel to the direction that coating is dispensed from its orifice.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins et al in view of Nakai et al 4,989,799, England et al and Takahashi et al.

Mullins et al, Nakai et al and England et al are applied for the reasons noted above. Mullins et al fails to teach the strand guide member is coupled to a module. However, it would have been obvious to adjustably couple the Mullins et al continuous

length substrate guide member within the module or unit or housing for the coating assembly since Takahashi et al teaches adjustably couple the continuous length substrate guide member within the module for the obvious advantage of greater control of the process of coating the strand by enabling one to position the strand in and out of contact with the coating head.

Claims 14,17 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins et al in view Nakai et al 4,989,799 and Smith 5,573,226.

Mullins et al and Nakai et al are applied for the reasons noted above. The use of recessed portion in the side surface of a filamentary material guide is known as exemplified Smith to obviously provide greater control of the direction of travel of the filamentary material or elongated material (see Figure 7 of Smith). Nakai et al discloses that drop out of the filaments between the guide surfaces of the two parallel guide rolls 4a', 4b' can be a problem if the length of the two parallel guide rolls 4a', 4b' is insufficient. Therefore, it would have been obvious to modify Mullins et al system by arranging a recessed portion in the side surface of a filamentary material guide about which the strand is capable of being partially drawn since Smith shows providing a recessed portion in the side surface of a filamentary material guide for the problem disclosed by Nakai et al of misalignment of the traveling filament or drop out of the traveling filament as the filaments travel through the parallel roll guide surface which would include Mullins et al parallel roll guide surface and the strand is capable of being at least partially drawn about the recessed side portion of its at least one of the strand orienting pin or parallel roll guide surfaces to facilitate guiding of the strand through the

system. Thus claim 34 is obvious over the above references. With respect to claim 14, the same rejection applied to claim 34 is applied here. Smith shows the cylindrical shaped strand axial orientation aligning member such in Figure 7 includes a recessed side portion which is comprised of at least a partially cylindrical surface portion. With respect to claim 17, Mullins et al aligning member extends parallel to the direction that coating is dispensed from its orifice.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins et al in view of Nakai et al 4,989,799, Smith 5,573,226 and Takahashi et al.

Mullins et al, Nakai et al and Smith are applied for the reasons noted above. Mullins et al fails to teach the strand guide member is coupled to a module. However, it would have been obvious to adjustably couple the Mullins et al continuous length substrate guide member within the module or unit or housing for the coating assembly since Takahashi et al teaches adjustably couple the continuous length substrate guide member within the module for the obvious advantage of greater control of the process of coating the strand by enabling one to position the strand in and out of contact with the coating head.

Applicant's arguments filed 3/28/2008 have been fully considered but they are not persuasive.

Applicant's argument that the guide pins of the Mullins and Nakai apparatus do not align an axial orientation of the strand is found to be non-persuasive since the strand of Mullins and Nakai inherently has an axis about which it is always aligned via its strand axial orientation as set forth in its respective drawings.

Applicant's argument that there is no reason to substitute the Mullins guide rolls or pins with that of England is found to be non-persuasive. As discussed above, the use of notch or groove or recessed portion in the side surface of a filament guide is known as exemplified England et al to obviously provide greater control of the direction of travel of the filament. Further, England teaches coating the surfaces of the filament guide to reduce the friction between the strand contacting surfaces of the filament guide about which the strand is at least partially drawn to increase the working life of the filament guide. Nakai et al discloses that drop out of the filaments between the guide surfaces of the two parallel guide rolls 4a', 4b' can be a problem if the length of the two parallel guide rolls 4a', 4b' is insufficient. Therefore, it would have been obvious to modify Mullins et al system by arranging a recessed side portion or groove or notch in side surface of its at least one of the strand orienting pin or parallel roll guide surfaces about which the strand is capable of being partially drawn since England et al shows providing a notch or groove in a filament guide surface and coating the notch or groove with low friction coating for the problem disclosed by Nakai et al of misalignment of the traveling filament or drop out of the traveling filament as the filaments travel through the parallel roll guide surface which would include Mullins et al parallel roll guide surface and reducing friction of the strand which is capable of being at least partially drawn about the recessed side portion or groove or notch in side surface of its at least one of the strand orienting pin or parallel roll guide surfaces to facilitate guiding of the strand through the system.

Claims 22-27 and 29-31 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday. The examiner can also be reached on alternate Wednesdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A Lamb
Examiner
Art Unit 1734

/Brenda A Lamb/

Primary Examiner, Art Unit 1792